The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 37

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte JOHN I. YKEMA

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Appeal No. 1998-3076
Application 08/303,046

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HEARD: May 23, 2001

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Before HAIRSTON, GROSS, and BLANKENSHIP, *Administrative Patent Judges.*

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 2 through 45 and 53 through 60.

The disclosed invention relates to an electrical power system employing a plurality of nodes.

Claims 16 and 31 are illustrative of the claimed invention, and they read as follows:

16. An electrical power system comprising:

a. a plurality of branches for carrying power including;

i. branches for distributing power within said system to various loads; and

ii. at least one branch for connection to a power supply; and

b. node means, connecting said power supply branches and load branches, for selectably functionally controlling power flow between said power supply and load branches.

31. An electrical power system comprising:

a. a plurality of interconnected branches for carrying power including a power supply branch connected to a bus bar backplane to enable power to be distributed through other branches within said system;

b. means for connecting loads to branches other than said branch having said bus bar backplane connected thereto; and

c. node means, providing at least some connections between branches and loads, for selectably functionally controlling power flow from a power supply to the respective loads, including:

i. modularly packaged functional modules containing components and circuitry for performance of functions including switching, voltage conversion, frequency conversion, voltage regulation, over current protection, voltage inversion and voltage rectification, selected for performance at said node; and

ii. a modularly packaged control module programmable for controlling performance of said selected functions;

d. wherein functional modules common to a node abuttingly facingly contact the bus bars at the surface of the backplane so that terminals from circuits within the modules make electrical connection with said bus bars.

The reference relied on by the examiner is:

Bilas et al. (Bilas) 5,231,565 July 27, 1993

Claims 2 through 45 and 53 through 60 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bilas.

Reference is made to the briefs and the answer for the respective positions of the appellant and the examiner.

OPINION

We have carefully considered the entire record before us, and we will sustain the anticipation rejection of claims 16 through 21, 33 through 35, 37 and 40, and we will reverse the anticipation rejection of claims 2 through 15, 22 through 32, 36, 38, 39, 41 through 45 and 53 through 60.

The reference to Bilas, like appellant's disclosed and claimed invention, is directed to electrical power distribution. The primary function that Bilas is concerned with controlling is an overcurrent or an overload condition via the use of circuit breakers. The functions of overcurrent and overload are two of the many functions performed by appellant's disclosed invention (specification, pages 3, 6, 11, 14, 15, 17 and 18). Inasmuch as a node is nothing more than a circuit connecting point, Bilas, like appellant's

disclosed and claimed invention, discloses a myriad of nodes in his electrical distribution system. Bilas discloses at least two different types of modules, i.e., an interface module 24 and a circuit breaker module 20 (Figures 1a and 1b). The circuit breakers plug into sockets on the bus boards 16 and 18 (column 3, lines 46 through 55). The interface module is coupled to the same bus boards. The interface module houses an interface driver board 34, a power supply board 44 and a termination board 38 (Figure 2; column 4, lines 36 through 41). The interface driver board 34 is in turn coupled to the bus boards 16 and 18 via a pair of ribbon cables 30 and associated DB25-type connectors, and to the power supply board 44 and the termination board 38 via interconnect board 31 (Figure 3; column 4, lines 41 through 49). A programmable controller 32 is secured to the front panel of the interface module 24 using DB-9 connectors (column 4, lines 51 through 53; column 6, lines 8 through 16). Input power to the electrical distribution system is via input power lines 12, and output power from the system to loads is via exit power lines 14 (Figure 1a).

Based upon the foregoing, we agree with the examiner that the broadly recited limitations of claims 16 through 21 and 33 through 35 and 37 read on the teachings of Bilas. In claim 16, the "branches for distributing power within said system to various loads" is broad enough to read on the exit power lines 14 in Bilas, and the "at least one branch for connection to a power supply" is broad enough to read on the input power lines 12 in Bilas. Any one of the circuit breakers 20 in Bilas is connected

to a node in the load center 10 "for selectably functionally controlling power flow between said power supply and load branches." The node means of claim 16 is not described as a "multimodular multicomponent" subsystem (reply brief, page 2). The circuit breakers 20 in Bilas provide "over current protection" to the loads (claims 17 and 20) (brief, pages 14 and 15). Each of the bus boards 16 and 18 in Bilas functions as a backplane/bus bar, and a plurality of nodes are in the bus boards. The programmable controller 32 in Bilas (Figure 1a) is "at least one control module for controlling performance of selected functions, having a generally planar side with means thereon for complementally electrically

connecting said control module with at least one bus bar" via the "at least one" interface module 24 (claims 18 and 19) (brief, pages 14 and 15). The modules in Bilas (Figure 1a) are "vertically and horizontally adjacent to one another" (claim 21) (brief, page 15). Accordingly, the 35 U.S.C. § 102(b) rejection of claims 16 through 21 is sustained.

Turning to independent claim 33, appellant's only argument (reply brief, page 3) with respect to this claim is the control means senses power flow parameters, and takes protective action within nodes in the event sensed power flow parameters are

outside of preselected limits. As indicated *supra*, the programmable control module 32 in Bilas performs this function (claims 33, 34 and 37) (reply brief, pages 3 and 7). The programmable control module 32 is likewise at "nodes of the system" (claim 35) (reply brief, page 9). None of these claims requires "a control module within each node" (reply brief, page 7). Thus, the 35 U.S.C. § 102(b) rejection of claims 33 through 35 and 37 is sustained.

The 35 U.S.C. § 102(b) rejection of claim 40 is sustained because appellant has not presented any arguments to rebut the examiner's rejection.

The 35 U.S.C. § 102(b) rejection of claims 22 through 30 is reversed because we agree with the appellant (brief, page 16) that Bilas does not have a functional module that "facingly adjoins said control module."

Although the circuit breakers in Bilas will perform an overcurrent protection function, they will not perform the additional functions listed in claim 31 (reply brief, page 3). For this reason, the 35 U.S.C. § 102(b) rejection of claims 31, 38, 39 and 42 through 45 is reversed.

The 35 U.S.C. § 102(b) rejection of claim 32 is reversed because Bilas does not have "a power supply branch connected to a bus bar backplane to enable power to be distributed within said system through other branches connected to bus bars" (reply brief, pages 4 and 5).

The 35 U.S.C. § 102(b) rejection of claim 36 is reversed because Bilas does not have "a single programmable means at each node" (reply brief, page 7).

The 35 U.S.C. § 102(b) rejection of claim 41 is reversed because we can not discern from the figures of Bilas whether "planar sides of control and performance modules are abutting" (brief, page 16).

The 35 U.S.C. § 102(b) rejection of claims 53 through 56 and 2 through 15 is reversed because we agree with appellant's argument (reply brief, pages 3 and 4) that Bilas does not connect the power source to the bus bars.

The 35 U.S.C. § 102(b) rejection of claims 57[1] through 60 is reversed because we agree with appellant's argument (reply brief, page 4) that Bilas does not have " a power module comprising a plurality of bus bars supported in a back plane for connection to selected sources of power."

DECISION

The decision of the examiner rejecting claims 2 through 45 and 53 through 60 under 35 U.S.C. § 102(b) is affirmed as to claims 16 through 21, 33 through 35, 37 and 40, and is reversed as to claims 2 through 15, 22 through 32, 36, 38, 39, 41 through 45 and 53 through 60. In summary, the decision of the examiner is affirmed-in-part.

[1] In claim 57, the "node" lacks antecedent basis.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

KENNETH W. HAIRSTON Administrative Patent Judge	)
	) BOARD OF PATENT
	) APPEALS AND
ANITA PELLMAN GROSS Administrative Patent Judge	) INTERFERENCES
HOWARD B. BLANKENSHIP Administrative Patent Judge	)

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